# Regulatory Policies on Energy Efficiency and Renewable Resources

**Presentation for Governor's Task Force on** 

**Energy Efficiency and Renewables** 

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## **Energy Priorities**

- Energy conservation and efficiency
- Noncombustible renewable energy
- Combustible renewable energy resources
- Nonrenewable combustible energy sources
  - Natural gas
  - Oil or coal with a sulphur content of less than 1 %
  - All other carbon-based fuels

## **Energy Efficiency**

- Conservation
  - Reduce energy use
- Load Management
  - Reduce peak demand
- Fuel Switching
  - Replace electricity with another fuel

## **Energy Efficiency Policies**

- Attempt to capture all cost-effective energy efficiency over time
- Develop sustainable and robust energy efficiency infrastructure and marketplace
- Ensure fair competition in the energy efficiency marketplace

## **Energy Efficiency Strategies**

- Aggressive energy efficiency goals
- Services to all customer segments
- Variety of options available to all customers

## **Energy Efficiency Goals**

#### Developed over time

- Level of goals
  - Informed estimate
  - Long-range planning to develop potential
  - Normalization and negotiation

## Energy Efficiency Goals (cont)

- Type of goal
  - Net benefits
  - Demand and energy
  - Energy
  - Measures of success

## Services to all customer segments

- Cost-effective energy efficiency available in all customer segments
- All customers pay for energy efficiency measures
- Manifested in goals
  - Total company goal
  - Sector goals
  - Sector targets

## Variety of options

- Types of options
  - Rebates
  - Interest rate buy-downs
  - Loans
- Results in higher customer participation

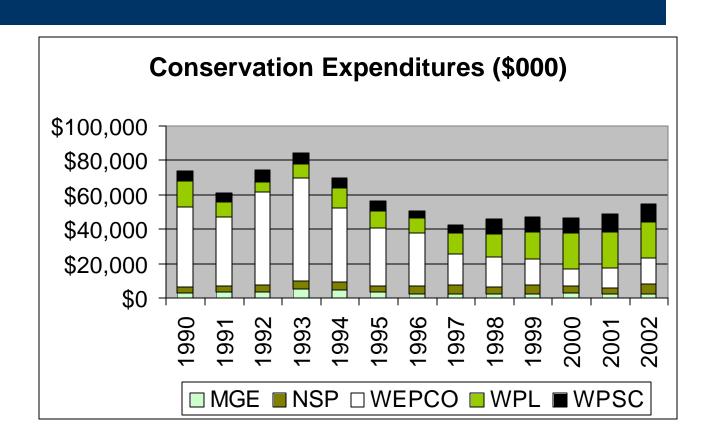
### **Energy Efficiency Infrastructure**

- Neutral incentives based on savings
- Market preparation activities
  - Credit towards goals
  - Evaluation

## Ensure Fair Competition in the Marketplace

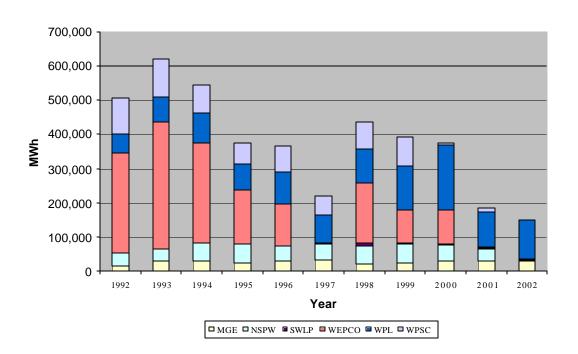
- Neutral incentives
- Use of contractors to install measures
- Design and delivery of energy efficiency services by third parties

## Energy Efficiency Expenditures



## **Energy Savings (Annual)**

#### **Energy Savings**



- What are they?
- Regulatory Policies
- Renewable Portfolio Standard
- Green Pricing
- Renewable Energy Initiatives

- Fuel cells that use a renewable fuel
- Solar thermal electric or P.V.
- Wind power
- Small Hydro (less than 60 MW)
- Biomass
  - Landfill gas
  - Anaerobic Digestion
  - Co-fired with coal
  - Dedicated





Off Grid Central. WI



Northland College Ashland WI

Also in Wis. Stat. 196.378(1)(h)

- Tidal or wave action
- Geothermal technology
- Any other resource designated by Commission in rules

### Regulatory Policies for Renewables

- Net Metering for under 20 kW (June 1983)
- PSC 113.0207 (June 1983)
  - Interconnection Rules For Small Generators
- Advance Plan 6 (9/12/92)
  - Standard Contracts for COGs
  - Net metering for IOUs
  - Each utility to designate Renewable Contact

## **Regulatory Policies**

- Advance Plan 7 (12/22/95)
  - Biomass Resource Assessment (needs updating)
  - Statewide Wind Siting Guidelines (draft)
  - Wind Resource Assessment (1/2002 report)
  - Statewide Daylighting Collaborative (ECW)
- 1997 Wisconsin Act 204
  - 50 MW by 12/31/00
- PSC 119: Interconnection Rules for DG

## **Regulatory Policies**

 Efficiency and Renewables must be considered in CPCN process

- Green Pricing encouraged
- 1999 Wisconsin Act 9
  - Renewable Portfolio Standard (RPS)

## **Green Pricing Programs**

<ul><li>Alliant/WP&amp;L</li></ul>	\$.02 KWh
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- Dairyland \$.02 KWh
- MG&E \$.0333 KWh 4,500
- We Energies \$.0204 KWh 12,000
- WPPI \$.02 KWh
- WPS \$.0265 KWh 1,000

#### Renewable Portfolio Standard

- Established as part of 1999 Act 9 (Wis. Stat. §196.378).
- Applies to 110 Electric Providers in State
  - EPs with more than 10% are exempt.
- DOA monitors compliance.
- PSC responsible for credit tracking and facility certification.

### Wisconsin's RPS

Year	Minimum	
2001 - 2002	0.5 %	
2003 - 2004	0.85 %	
2005 - 2006	1.2 %	
2007 - 2008	1.55 %	
2009 – 2010	1.9 %	
2011 and beyond	2.2 %	

#### **RPS - Future**

- 2002: 1.6% of states electricity came from qualified renewable resources.
- Recent study looked at 4 scenarios:
  - 2.2% by end of 2011
  - 4.4% by end of 2011 with same rules
  - 10.0% by 2013 with no exceptions
  - 10.0% by 2013, but including hydro

## Regulatory Initiatives Used Elsewhere (Source: www.dsireusa.org)

Policy	Number
Public Benefits Fund	15
Disclosure	24
RPS	16
Net Metering	45
Contractor License	10
Equipment Certification	9
Access Laws	44
Standards (design/construction)	23
Green Pricing	17

#### **Financial Incentives**

	Utility	State	Local
Personal tax		30	
Corporate tax		40	
Sales tax		23	
Property tax		31	
Rebates	26	20	3
Grants	5	25	5
Loans	9	26	6

## **Summary: Wisconsin Regulatory Policies**

#### Renewables Encouraged by:

- Net Metering
- Statewide, Interconnection Standards
- Renewable Portfolio Standard
- Green Pricing Programs
- Focus on Energy Incentives

